REMARKS

The Examiner has rejected claims 1, 5-9 and 13-17 under 35 U.S.C 102(e) as being anticipated by Ci et al. (USP 7,096,274 B1). Furthermore, claims 2-4 and 10-12 have been rejected under 35 U.S.C 103(a) as being unpatentable over Ci et al. in view of Amalfitano (USP 6,236,647 B1).

Rejected claims 1, 2, 9, and 10 have been cancelled without prejudice in order to expedite prosecution of this application. The Applicant reserves the right to pursue these cancelled claims in a continuing application or otherwise.

Claims 3 and 11 have been amended to include recitation of former base claims in independent form. Claim 17 has been amended to include recitation of former claims 3 and 4. Remaining dependent claims have been amended to be dependent on new independent claims.

With respect to Claim 3, the Examiner indicated that obtaining a frame size as a computed numerical solution to the claimed equation $1+\frac{O}{F_{opt}+O}=\frac{\alpha F_{opt}}{1-e^{-\alpha F_{opt}}}$ where O is overhead, F_{opt} is optimum frame size and α = -ln(1-probability of bit error) is well known in the art. Applicant respectfully indicates that the claimed equation with the recited parameters is not, to their knowledge, known in the art for selecting frame size. The Examiner is kindly requested to provide a reference if he disagrees.

Also with respect to claim 3, the Examiner has indicated that the formula disclosed by Amalfitano for computing an optimum frame size can be modified /implemented in the communication system of Ci et al.

Applicant contends that the Amalfitano equation for solving for an optimum frame size is substantially distinct from the Applicant's claimed equation. Specifically, the Amalfitano equation is $X+H=\sqrt{G+H/8}$ (equation (16)) , where X is the sought data frame size in bytes, H is the frame overhead in bytes and G is the number of good bits received, on average, before a bit is received in error. As far as understood by the Applicant, the following connections can be

established between the parameters of the Amalfitano equation and the parameters of the claimed equation: $X+H = (1/8)*F$, $H = (1/8)*O$ and $G+1 = 1/p_b$. Accordingly, the Amalfitano equation can be rewritten as:

$$F = 8\sqrt{1/p_b - 1 + O/64}$$

Thus, the Amafitano equation involves solving a square root function to determine frame size F as a function of overhead O and bit error rate p_b. In contrast, the claimed equation involves solving numerically a transcendental equation with a natural logarithm function and an exponential function to determine an optimum frame size as a function of overhead and probability of bit error rate.

Based on at least this reasoning, the Applicant respectfully indicates that Amalfitano does not disclose nor otherwise suggest all of the limitations of claim 3. Furthermore, the remaining cited references neither disclose nor otherwise suggest the claim 3 limitations.

Consequently, Applicant considers claim 3 allowable over the cited art. As independent claims 11 and 17 recite the same equation as claim 3 for solving for a frame size, they are also considered allowable over Ci et al. and Amalfitano. Furthermore, the remaining claims are also considered allowable as dependent on allowable base claims.

No new matter has been entered by these amendments.

CONCLUSION

In view of the above amendments and remarks, it is believed that all current claims are in condition for allowance, and it is respectfully requested that that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By _____

James M. Smith
Registration No. 28,043
Telephone: (978) 341-0036
Facsimile: (978) 341-0136

Concord, MA 01742
Dated: 12/18/7